



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/763,029

04/10/2001

Manfred Schaefer

1454.1048/RA

1983

21171

7590

12/22/2005

STAAS & HALSEY LLP

SUITE 700

1201 NEW YORK AVENUE, N.W.

WASHINGTON, DC 20005

EXAMINER

SHERKAT, AREZOO

ART UNIT

PAPER NUMBER

2131

DATE MAILED: 12/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/763,029	SCHAEFER, MANFRED	
	Examiner	Art Unit	
	Arezoo Sherkat	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-19 and 21-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3, 5, 6, 8-19 and 21-25 is/are rejected.
- 7) ☒ Claim(s) 4 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

This office action is responsive to Applicant's amendment filed on Aug. 22, 2005.
Claims 3-19 and 21-25 are pending.

Response to Arguments

Applicant's arguments filed Aug. 22, 2005 have been fully considered but they are not persuasive.

Applicant argues that Baum fails to teach "forming an accessing cryptographic value for each accessing process, and comparing the accessing cryptographic value with the cryptographic value stored in the process file for each accessing process listed the process file" where "the process file is separate from the program and includes a cryptographic value that uniquely identifies each process".

Examiner responds that Baum discloses an access-list entry (ALE). Bit 7 of ALE is a private bit which, when 0, specifies that any program is authorized to use this access-list entry in an ART operation (i.e., to use the address space associated with this access-list entry). When bit 7 is 1, an access-list extended authorization index value in bits 16-31 of the ALE is used to determine if a program is authorized to use this access-list entry (i.e., note that bits 16-31 form different ALEAXs for different processes depending on different combinations and permutations of 0's and 1's)(Col. 13, lines 19-50).

Examiner respectfully maintains the rejection formulated on May 16, 2005 as follows:

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 3, 5-6, 8-19, and 21-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Baum et al., (U.S. Patent No. 5,023,773 and Baum hereinafter).

Regarding claims 3, 5-6, and 8-19, Baum discloses wherein a call of the accessing process is forwarded to a checking function in which the check takes place, and wherein the checking function is integrated into an operating system core of an operating system with which the programs are executed (Col. 22, lines 5-60).

Regarding claims 9-13, Baum discloses wherein after the integrity test of the protection program, the integrity of all processes contained in the process files is checked and the method according to claim 21 is executed only if the integrity of all of the processes contained in the process files is assured. (Col. 13, lines 19-67).

Regarding claims 21 and 22, Baum discloses a method for protecting several programs from unauthorized access by processes, comprising:

assigning an address space to each program file to be protected, assigning a process file, separate from the program file, to each program file to be protected, where the process includes at least one cryptographic value, each uniquely identifying a process that may run in the address space (Col. 13, lines 19-28),

determining, during execution of each program in each program file to be protected, for each accessing process that attempts to access the address space of the program file, whether the accessing process is listed in the process file assigned to the program file (i.e., an access-list entry (ALE). Bit 7 of ALE is a private bit which, when 0, specifies that any program is authorized to use this access-list entry in an ART operation. When bit 7 is 1, an access-list extended authorization index value in bits 16-31 of the ALE is used to determine if a program is authorized to use this access-list entry) by forming an accessing cryptographic value for each accessing process (Col. 13, lines 19-50), and

comparing the accessing cryptographic value with the cryptographic value stored in the process file for each accessing process listed in the process file, and at least one of starting and continuing execution of the accessing process only if said comparing determines a match between the accessing cryptographic value (i.e., ALEAX in control register) and the cryptographic value stored in the process file (i.e., ALEAX in access-list entry) for the accessing process (Col 22, lines 5-60).

Regarding claims 23-25, Baum discloses a set of several arrays and a server array connected with each of the several arrays, to protect several programs from unauthorized access by a process, comprising:

in each of the several arrays a processor programmed to assign an address space and a process file to each program file to be protected, where the process file is

Art Unit: 2131

separate from the program file and includes a cryptographic value that uniquely identifies each process that may run in the address space (Col. 13, lines 19-28),

to determine, during execution of each program in each program file to be protected, for each accessing process that attempts to access the address space of the program file, whether the accessing process is listed in the process file assigned to the program file (i.e., an access-list entry (ALE). Bit 7 of ALE is a private bit which, when 0, specifies that any program is authorized to use this access-list entry in an ART operation. When bit 7 is 1, an access-list extended authorization index value in bits 16-31 of the ALE is used to determine if a program is authorized to use this access-list entry) by forming an accessing cryptographic value for each accessing process Col. 13, lines 19-50), and

comparing the accessing cryptographic value with the cryptographic value stored in the process file for each accessing process listed in the process file, and to at least one of start and continue execution of the accessing process only if a match is found between the accessing cryptographic value i.e., ALEAX in control register) and the cryptographic value stored in the process file (i.e., ALEAX in access-list entry) for the accessing process (Col 22, lines 5-60).

Allowable Subject Matter

Claims 4 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arezoo Sherkat whose telephone number is (571) 272-3796. The examiner can normally be reached on 8:00-4:30 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2131

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Arezoo Sherkat
Patent Examiner
Group 2131
Dec. 16, 2005



Primary Examiner

AU2131

12/16/05